P2-261 FACTORS ASSOCIATED WITH OVERWEIGHT IN CHILDREN: CASE STUDY IN THE SOUTHERN BRAZIL
doi:10.1136/jech.2011.142976j.94

C Rosanelli, * 2C Nakashima, 3M Orlando, 3C Rosanelli, 2M Neto-Oliveira, 2A Oliveira, 1, 2J Faria-Neto. 1PUCPR, Curitiba, Parana, Brazil; 2PUCPR, Maringa, Parana, Brazil; 3UEM, Maringa, Parana, Brazil; 4Hospital Constantino, Curitiba, Parana, Brazil

Excess weight in childhood is a predictor of co morbidity in adulthood. This research aimed to identify factors associated with overweight among schoolchildren. This cross-sectional study involved children of both sexes aged between six and 10.9 years of age, enrolled in 24 public and private schools in the urban region of Maringa, Parana, southern Brazil. The collection were done in the school environment, with measurement of the weight and height of 53.2% were female, age range 8.7 to 16.9 years old and 24.1% presented excess weight. Overweight children from private schools and better socio-economic conditions showed positive relation with the excess weight. Overweight children from private schools and better socio-economic conditions showed positive relation with the excess weight (p < 0.05). The total evaluation of variables was done getting adjusted to a model of Multinominal Logistic Regression considering the nutritional condition as response variable and the age, gender, socioeconomic status and Body Mass Index as explanatory variables. This project was approved by the Permanent Ethic Committee of Researches involving human beings from UEM. From 5057 schoolchildren, 55.2% were female, age range 8.7 ± 1.3 years old and 24.1% presented excess weight. Overweight children from private schools and better socio-economic conditions showed positive relation with the excess weight (p < 0.001) and children younger than 5 years old have more chances of being overweight (p = 0.058). The impact of these results accelerates the urgency of preventive actions towards overweight and its intercorrences in precoce ages.

P2-262 GREEN TEA CONSUMPTION REDUCES CANCER MORTALITY IN JAPAN: THE JICHI MEDICAL SCHOOL COHORT STUDY
doi:10.1136/jech.2011.142976j.95

T Takeshima,* 1S Ishikawa, 2T Saegusa, 3T Ojima, 1Y Nakamura, 1E Kajii. 1Jichi Medical University, Shimotsuke, Tochigi, Japan; 2Sakuma Hospital, Tennyu, Hamamatsu, Shizuoka, Japan; 3Hamamatsu University School of Medicine, Higashi-ku, Hamamatsu, Japan

Introduction Previous studies have shown that Green tea consumption reduces colon cancer mortality and the risk of liver cancer. However, no studies have examined the association between green tea consumption and all-cancer mortality.

Methods A multi-centre population based prospective cohort study in 12 districts in Japan collected baseline data on 12,490 participants from 1992 to 1995. Individuals for whom a history of green tea consumption was missing were excluded as were individuals with a past history of any cancer, myocardial infarction and stroke. Green tea consumption was measured using self-report questionnaires. Date and cause of death were determined by death certificates review. Data were analysed using Cox proportional hazards modelling.

Results In total 10,197 Japanese adults aged 40–89 years old, 3976 men and 6261 women, were included in the study. Over 11.9 years of follow-up 887 individuals died, 352 from cancer. In men, the hazard of all-cancer mortality relative to those who reported drinking < 1 cup/day of green tea was 0.90 (95% CI 0.27 to 0.95) for 1–2 cups/day, 0.75 (0.46 to 1.21) for 3–4 cups/day, 0.61 (0.38 to 0.99) for ≥ 5 cups/day, respectively (p = 0.22 for trend). Corresponding values in women were 0.60 (0.29 to 1.20), 0.59 (0.34 to 1.02), 0.48 (0.27 to 0.84), respectively (p = 0.02 for trend).

Conclusion Green tea consumption is associated with a reduced hazard of all-cancer mortality.

P2-263 EPIDEMIOLOGY OF CHRONIC RENAL FAILURE AMONG ADMITTED PATIENTS TO THE MILITARY HOSPITAL, TAIZ (YEMEN)
doi:10.1136/jech.2011.142976j.96

J Saleh.* Faculty of Medicine, Aden University, Aden, Yemen

Objective This study was conducted with the principal objective of contributing to the study of the problem of renal failure in Yemen and the factors related to it.

Material and Methods All the files of the patients diagnosed as chronic renal failure being admitted to the military hospital in Taiz Governorate (Yemen) for haemodialysis during the period June–November 2010 representing 99 cases from Taiz, Ibb and Hodeidah Governors were systematically reviewed and statistically analysed using simple percentage.

Results The results showed that the males were affected more than females with a ratio of 6:4 with a peak incidence group above 40 years for both sex, and most of the admitted patients were farmers being all chat chewers (70%). Malaria was reported among 30% of the admitted patients while another 30% of them were having a history of renal parenchymal diseases several years before. Death was reported in 27% of the cases and the outcome was unknown in most of the patients.

Conclusions High number of cases were reported in the last years in different governorates of Yemen which could be regarded as an alarming situation.

Recommendations An urgent need for further studies to explore deeply the associated factors to this problem for possible interventions actions to control it as well as improving the facilities for renal dialysis in different hospitals.

P2-264 POTENTIAL LIVES SAVED BY CHRONIC DISEASE PREVENTION AND CONTROL IN LATIN AMERICA AND THE CARIBBEAN
doi:10.1136/jech.2011.142976j.97

A Samuels,* 2J Hospedales, 1N Unwin. 1University of the West Indies, Cave Hill, Barbados; 2Pan American Health Organization, Washington, USA

Introduction Chronic noncommunicable diseases are the major cause of death and disability in all regions of the world, with the exception of sub Saharan Africa, with particularly high levels in parts of the Caribbean and Latin America (LAC). The WHOs has shown conservatively that a 2% reduction per year for 10 years in mortality from chronic noncommunicable diseases is achievable from a combination of population wide measures and targeting individuals at high risk. Our aim was to inform public health priority setting
through estimating the potential impact and cost of these interventions across LAC.

**Methods** WHO estimates of the potential impact of three interventions in four Latin American countries were extrapolated, based on UN estimates of population size and for the years 2005–2010, to all areas of LAC.

**Results** A 15% reduction in salt intake (628 000 deaths averted), 25% reduction in smoking through increased implementation of the Framework Convention on Tobacco Control (441 500) deaths averted), and scaling up treatment of 60% those already in contact with health services at high risk of cardiovascular death (1 167 000 deaths averted), would avert a total of 2.2 million deaths in LAC over 10 years. More than half of these deaths would be in people aged <70 years old. These interventions would cost <1% of the existing health budget.

**Conclusion** These estimates show that substantial benefits are achievable, and are being used to prioritise activities within the LAC region.

**P2-265** MORTALITY IN OLDER MEN OF SOUTHEAST BRAZIL: A STUDY OF ASSOCIATED CAUSES OF DEATH
doi:10.1136/jech.2011.142976j.98

L M Santiago,* L L Luz, I E Mattos. Oswaldo Cruz Foundation, National School of Public Health, Rio de Janeiro, Rio de Janeiro, Brazil

**Introduction** The adoption of unhealthy western lifestyles has contributed to changes in mortality patterns in developing countries. The aim of this study was to evaluate associated causes of death in older men in a medium-size Brazilian city.

**Methods** The study was based on a cohort of 2859 older men living in Juiz de Fora, Brazil, followed from 2006 to 2010. All death certificates were retrieved from the Mortality Information System of the city. Underlying and associated causes of death were coded according to the 10th International Classification of Diseases.

**Results** There were 298 deaths and mean age at death was 73.4 years. Diseases of the circulatory system (100–199) corresponded to 108 (36.2%) deaths and its major associated causes were other circulatory diseases, diseases of the respiratory system (100–199) and infectious and parasitic diseases (A00–B99). Neoplasms corresponded to 65 deaths (21.8%) and predominant associated causes were respiratory diseases, mainly pneumonias, and infectious and parasitic diseases. Diseases of the respiratory system corresponded to 44 (14.3%) deaths and infectious and parasitic diseases were the main associated cause. These three groups comprised 72.8% of the underlying causes in the cohort.

**Conclusion** Circulatory and respiratory diseases and neoplasms were major causes of mortality in this cohort and also represent an important public health problem in Brazil. The influence of a westernised life style is probably reflected in this pattern of chronic diseases. Although not as important, infectious and parasitic diseases are still present as associated causes and likely worsening health conditions in this cohort.

**P2-266** RELATIVE VS CANCER-SPECIFIC SURVIVAL: ASSUMPTIONS AND POTENTIAL BIAS
doi:10.1136/jech.2011.142976j.99

1D Sarfati,* 1T Blakely, 1M Soeberg, 1K Carter, 2N Pearce. 1University of Otago, Wellington, New Zealand; 2Massey University, Wellington, New Zealand

**Introduction** Cancer-specific and relative survival analyses are the two main methods of estimating net cancer survival. Bias through misclassification of cause of death is well recognised for cancer-specific survival, but to date there has been no systematic examination of the potential bias from using an external comparison group for relative survival. This latter bias may be particularly important for smoking-related cancers where the expected survival is lower than the general population because of the high incidence of non-cancer smoking-related mortality.

**Methods** We use unique data from the New Zealand census which provides information on individual smoking status, allowing us to produce smoking-adjusted life tables. We apply these to relative survival estimates for lung and bladder cancers, known to be strongly associated with smoking. We also compare these with simulations to estimate the effect of misclassification bias on cancer-specific estimates.

**Results** Five-year relative survival estimates were similar regardless of which life tables were used for lung cancer. For bladder cancer, estimates varied more markedly; for example, 5-year survival estimates ranged between 0.70 and 0.84 for male smokers. Simulations suggested that for cancer-specific analyses, bias of up to 20% misclassification of cause of death resulted in estimates of 5-year survival that were 1.3–19% different from “true” estimates, with largest error for those cancers with poorest survival.

**Conclusions** Both cancer-specific and relative survival methods are potentially valid for population-based cancer survival studies. Both methods are susceptible to bias which is sensitive to the survival probability of the cancer under study.

**P2-267** THE UNUSUAL EPIDEMIOLOGY OF TESTICULAR CANCER IN NEW ZEALAND
doi:10.1136/jech.2011.142976j.100


**Introduction** Testicular cancer (TC) is increasing rapidly in developed countries. Drivers of these trends remain obscure. Ethnic differences in TC incidence within countries are often marked; white populations consistently having the highest rates. Many studies have found that high socioeconomic status is a risk factor for TC. There is some evidence that epidemiological patterns of TC may differ in New Zealand. This study investigates the ethnic and socioeconomic patterns of TC incidence in New Zealand.


**Results** The study included 2000 cases of TC. We found increasing rates of TC for all ethnic and income groups since the 1990s. Māori had higher rates, and Pacific and Asian lower rates than European men with rate ratios pooled over time of 1.51 (95% CI 1.31 to 1.74); 0.40 (95% CI 0.26 to 0.61) and 0.54 (95% CI 0.51 to 0.94) respectively. Men with low incomes had higher risk of TC than those with high incomes (pooled rate ratio for lowest to highest income groups =1.23; 95% CI 1.05 to 1.44).

**Conclusions** New Zealand is unique in the world, having the only non-white population with a higher TC incidence than the local white population. Also unusually, lower socioeconomic men have higher rates of TC. Given the lack of understanding of TC aetiology, these unusual patterns may provide clues for future research.